
Injectable myocardial matrix as a scaffold for myocardial tissue engineering.

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Public Summary:

Scientific Abstract:

Current injectable materials utilized in myocardial tissue engineering have been borrowed from other tissue engineering applications and have not been specifically designed for the myocardium. We have recently tested the feasibility of using an injectable form of myocardial extracellular matrix that would provide cardiac specific matrix cues as well as be amenable to minimally invasive delivery. We have demonstrated that this material self-assembles in vivo to form a nanofibrous scaffold, which supports the infiltration of neovasculature. We have also demonstrated that this material may be delivered minimally invasively through a catheter.

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